

PATENT COOPERATION TREATY
PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference FP18807	<div style="display: flex; justify-content: space-between;"><div>FOR FURTHER ACTION</div><div>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</div></div>
International application No. PCT/AU2003/001588	<div style="display: flex; justify-content: space-between;"><div>International filing date (<i>day/month/year</i>) 28 November 2003</div><div>(Earliest) Priority Date (<i>day/month/year</i>) 29 November 2002</div></div>
Applicant BIOTA SCIENTIFIC MANAGEMENT PTY LTD et al	

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of **5** sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the **title**, ☒ the text is approved as submitted by the applicant.
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**, ☒ the text is approved as submitted by the applicant
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure

☐ because this figure better characterizes the invention

☒ **None of the figures**

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos : 1-7 (in part) and 9-44 (in part)
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
The scope of the claims is such that it is not economically feasible to search them comprehensively.
3. ☐ Claims Nos :
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
- ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2003/001588

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: C07H 15/234; A61K 31/7036; A61P 31/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See electronic data base

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

STN:CA (sss derived from exemplified matter)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Nakagawa S et al., "Effect of N-alkylation in kanamycin antibiotics", Microbial Drug Resistance, 1976, 2, 269-272 See compounds 11-13	1-7, 15-18, 23, 24, 33-36, 40-44
X	Nakagawa S et al., "Aminoglycoside antibiotics. XII. Effect of N-alkylation in kanamycin antibiotics", Journal of Antibiotics, 1978, 31(7), 675-680 See compounds 11-13	1-7, 15-18, 23, 24, 33-36, 40-44
X	Abe Y. et al., "Aminoglycoside antibiotics. XI. Synthesis and activity of 4'-deoxykanamycin B." Journal of Antibiotics, 1977, 30(11), 1004-1007 see chart 1	1-7, 12, 13, 15-18, 23

☒ Further documents are listed in the continuation of Box C ☒ See patent family annex

"A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
18 February 2004

Date of mailing of the international search report
2-6 FEB 2004

Name and mailing address of the ISA/AU
AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustalia.gov.au
Facsimile No. (02) 6285 3929

Authorized officer

O. L. CHAI

Telephone No : (02) 6283 2482

C (Continuation).

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4347354 (CRON et al.) 31 August 1982 See claim 1 and examples	1-7, 15-18, 23, 24, 33-36, 40-44
X	US 4020269 (HIRAGA et al.) 26 April 1977 See reference examples 2-6	1-7, 12, 13, 15
X	US 3940382 (UNEZAWA et al.) 24 February 1976 See claims and column 6 lines 37-column 7 line 2	1-7, 12, 13, 15-18, 23-36, 39-44
X	US 4024332 (FENNER et al.) 17 May 1977 Claim 20 and column 14 line 1-59	1-7, 12, 13, 15-18, 23-36, 39-44

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2003/001588

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	4347354	AR	218910	AT	312778	BE	866586
		CA	1100953	CA	1105452	CA	1105454
		CH	639104	CY	1241	DE	2818822
		DE	2818992	DK	182978	DK	183078
		DK	477286	EG	13710	ES	469303
		FI	781288	FR	2388826	FR	2388827
		GB	1598294	GR	73993	HK	51484
		JP	53149951	JP	57062293	KE	3398
		LU	79541	MY	52885	NL	7804503
		NO	781437	NO	831197	PL	206457
		PT	67959	SE	7804973	SE	8305538
		SU	1480774	US	4424343	YU	102478
		YU	102578				
US	4020269	CA	1061337	CH	630644	DE	2514985
		DK	151475	FR	2267110	GB	1509802
		JP	50131950	JP	50131963	JP	51004147
		NL	7504315	SE	7504087		
US	3940382	DE	2440956	FR	2242400	GB	1446082
		JP	50047950				
US	4024332	BE	815910	DE	2427096	DK	304574
		ES	426998	FR	2232326	GB	1445871
		GB	1445872	JP	50035131	LU	70223
		NL	7407483				
END OF ANNEX							